Advantage Kentucky Alliance

AKA and their Kaizen approach allows our employees to be involved in making permanent, progressive changes that enable us to be more competitive and grow our business. Our partnership with AKA provides significant value to both our hourly team members and staff alike." Greg Johnston, Industrial Engineer

Improvement Project Yields 3X Efficiency

ABOUT. Founded in 1965, Skilcraft Sheetmetal has long been a pioneer in the rapidly changing world of custom metal fabrication, through testing and early adoption of new technologies. Today's customer base covers a broad range of industries, including commercial, medical and aerospace. The Burlington, Kentucky-based company employs 100 team members who laser cut, form, weld, assemble and paint parts and completed products to customer specification.

THE CHALLENGE. Skilcraft and its employees have embraced Lean Manufacturing through classroom training and subscription Kaizen Days to address continuous improvement needs. When company leaders noticed a wide variation in reported labor time for similar parts, they called on Advantage Kentucky Alliance (AKA), a NIST MEP affiliate, for assistance. According to employee reports in the computer tracking system, the company processed some parts at 80 percent of the engineering standard time, while others were taking up to 300 percent. Skilcraft was losing money during the manufacturing process as well as jeopardizing future business in the very competitive marketplace.

MEP'S ROLE. Skilcraft and AKA organized a one-day Kaizen improvement event to determine the root cause of the labor time variation and develop solutions. The Skilcraft team performed a Job Methods time study of many parts going through the process, identifying all of the activity included in the reported time, including time spent walking, data entry, inspection, rework and searching. They quickly found that while Skilcraft manufactured one part with 86 percent value-added activity, parts with a different feature requiring an additional fixture made the process very inefficient, with only 37 percent of the effort adding value.

The team brainstormed ways to improve the process to eliminate the high degree of non-value added activity. One breakout idea was to replace the ineffective fixture with a new device. A team of two operators and two engineers designed and fabricated an ergonomically correct, electro-pneumatic, floor-mounted rotational positioning work aid. Not only was this fixture successful at holding the part, the increase in work content improved quality and eliminated additional post processes. Now the company can realistically quote new work that in the past was lost to competitors.





RESULTS



\$27,000 in positive financial impact



Engineering labor standard reduced from 3 to 1

NEXT STEPS



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